ARGUMENTS/REMARKS

Claims 2, 3, 5-14 and 18-26 are pending in this application.

Claims 11-14 have been withdrawn.

No claims stand allowed.

Claim 2 has been amended for further prosecution. Support for the amendment may be found, for example, on page 6, lines 9-10 and page 8, lines 25-26 of the present specification.

No new matter has been introduced by this amendment.

Rejection of Claims under 35 U.S.C. § 103:

Claims 2, 3, 5-10, and 18-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,074,518 to Imafuku et al. in view of U.S. Patent 6,019,060 to Lenz, among which claim 2 is the independent claim. The rejection is respectfully traversed.

In the Office Action, the Examiner repeats the previous rejections identical to those in the Final Office Action of July 25, 2007. In addition, in response to Applicant's arguments of October 10, 2007, the Examiner maintains that "it would have been obvious ..., with a reasonable expectation of success, to modify the apparatus taught by Imafuku et al. to incorporate the vertically arranged and movable confinement rings taught by Lenz, in order ... to allow local control of the pressure at the substrate surface during the plasma processing, and thereby, among others, to improve response time." Applicant respectfully disagrees the reasons set forth below.

Claim 2

Claim 2, as amended, recites, among others, that a magnetic field magnetically enhancing physical confinement provided by the at least one confinement ring, the magnetic field not having a strength to magnetically confine a plasma, wherein magnetic field lines passing from the first magnetic element to the second magnetic element pass through the at least one confinement ring.

Imafuku relates to plasma confinement in a plasma processing apparatus. Imafuku's magnets are designed to confine the plasma such that the magnetic field encircles the plasma generating region, thereby enclosing the plasma in the plasma generating region" (column 12, lines 43-47 and column 20, lines 22-24 of Imafuku). That is, Imafuku's magnet field must be by itself strong enough to confine the plasma, contrary to the claimed invention in which the magnetic field does not have a strength to magnetically confine a plasma.

Lenz discloses a cam-based confinement ring. According to the Examiner's reasoning, Lenz's confinement ring is combined with Imafuku's magnets in order "to allow local control of the pressure at the substrate surface during the plasma processing, and thereby, among other benefit, to improve response time." Thus, the alleged motivation of combination is to allow local control of the pressure, and the alleged reasonable expectation of success is that for improving response time or other benefits, if any, suggested by Lenz, in the alleged combination.

However, it is "important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does." *KSR*, 550 U.S. at ___, 82 USPQ2d at 1396 (emphasis added). Lenz does not teach or suggest changing the strength of any magnetic field (of Imafuku), or providing any interaction of a magnetic field with its cam-based confinement ring. Since the existence or strength of magnetic field has nothing to do with local pressure control by Lenz's confinement ring, there is no reason, no motivation, and no reasonable expectation of success to improve response time or other benefits by changing the strength of the magnet field when Lenz's confinement ring is allegedly combined with Imafuku's magnet. Similarly, since providing Imafuku with local pressure control by adding Lenz's cam-based confinement ring has nothing to do with Imafuku's magnetic plasma confinement, there is no reason, no motivation, and no reasonable expectation of success to change the strength of Imafuku's magnet field which is designed to satisfactorily confine the plasma, if Lenz's cam-based confinement ring should allegedly be combined with Imafuku.

Accordingly, in the alleged combination of Imafuku and Lenz according to the alleged motivation, "each element merely performs the same function as it does separately" (see the MPEP §2143 A). However, in the claimed invention, each element (the magnets) does not merely perform the same function as it does separately (as in the alleged Imafuku), but performs a different function, i.e., the magnet field does not and cannot magnetically confine plasma, but

enhance physical confinement of the confinement ring cooperatively. That is, in order to obtain the claimed invention, Imafuku's magnetic field should be weakened such that they cannot magnetically confine the plasma, changing their function. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. *KSR*, 550 U.S. at ___, 82 USPQ2d at 1395; *Sakraida v. AG Pro, Inc.*, 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); *Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, 152, 87 USPQ 303, 306 (1950) (emphasis added). The "predictable result" from the alleged combination would be an apparatus providing magnetic plasma confinement with Imafuku's magnets with local pressure control by Lenz's cam-based ring. It is not predictable from the alleged combination to provide a magnetic field which is not strong enough to magnetically confine plasma and enhancing physical confinement.

Accordingly, the alleged combination fails to teach or suggest the claimed invention in which a magnetic field magnetically enhancing physical confinement provided by the at least one confinement ring, the magnetic field not having a strength to magnetically confine a plasma, as claimed in claim 1. It is respectfully requested that the rejection based on Imafuku and Lenz be withdrawn.

Regarding Dependent Claims:

If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Claims 3, 5-10 and 18-26 directly or indirectly depend from claim 2 and thus include all of the limitations of claim 2. Accordingly, these dependent claims are also patentable at least for the same reasons discussed above.

Conclusion

Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,
BEYER LAW GROUP LLP

/Masako Ando/
Masako Ando
Reg. No. 59,900

P.O. Box 1687
Cupertino, CA 95015-1687
408-255-8001